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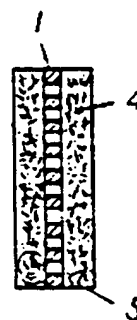
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APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

INVENTOR : UCHIDA MAKOTO;

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TITLE : ELECTRODE FOR LIQUID FUEL CELL



ABSTRACT : PURPOSE: To improve the durability and performance of an electrode and decrease the performance reduction after the power generation over a long period by using a mixture carbon fine powder and fiber-shaped graphite partially coated by carbon fine grains on the surface as the electrode.

CONSTITUTION: A mixture of carbon fine powder 2 carrying a noble metal catalyst and fiber-shaped graphite 3 is pressed and molded via a conducting porous substrate 1 to form an electrode 5. Carbon fine grains are coated on the surface of the fiber-shaped graphite 3, the noble metal catalyst is carried by the carbon fine grains, water-repellent resin is contained in the mixture. At least one kind of acetylene black, carbon black, activated carbon, and graphite is selected for the carbon fine grains. The carbon fine grains can be coated and fixed on the surface of the fiber-shaped graphite 3, thus the specific surface area of the fiber-shaped graphite 3 is increased. The adhesive strength and integrating force with the fine powder 2 are increased, the durability and conductivity of the electrode are improved, the performance reduction after the power generation over a long period can be decreased.

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